

News & Notes

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Less Invasive Techniques Make Back Surgery Easier to Undergo at Danbury Hospital Spine Center



Pictured from left at the Dec. 12 Medical Town Meeting, "Minimally Invasive Techniques in Spine Surgery," are speakers **David Kramer, MD**, **David Bomback, MD**, and **S. Javed Shahid, MD**.

Just as minimally invasive advances have revolutionized other types of orthopedic surgery, like joint replacement, new techniques are also making back surgery easier to undergo.

Surgery is now done using smaller incisions, with less muscle disruption and reduced pain and blood loss, according to **David Kramer, MD**, Co-Medical Director of the Spine Center at Danbury Hospital's Center for Advanced Orthopedic Care.

The surgery is often used for disc herniations, spinal stenosis, deformity caused by spine fractures and osteoporosis, and spinal fusions, he said. Dr. Kramer recently spoke at a Medical Town Meeting sponsored by Danbury Hospital on "Minimally Invasive Techniques in Spine Surgery." Joining him were **S. Javed Shahid, MD**, Co-Medical Director of the Spine Center and Chief of the Section of Neurosurgery; and **David Bomback, MD**, Department of Surgery, Section of Orthopedics.

In minimally invasive surgery, surgeons use video cameras and surgical equipment inserted through long tubes, and are assisted by computer monitors. These techniques are only available at dedicated Spine Centers, like Danbury Hospital, where surgeons are specially trained in performing this type of surgery, according to Dr. Kramer.

While it is helping people recover faster and have much smaller scars, traditional open surgery is still good for many types of problems, he added.

One of the procedures done minimally invasively is kyphoplasty, or the surgical treatment of vertebral compression fractures, according to Dr. Shahid.

Compression fractures occur in the elderly when osteoporosis causes bones to thin and become susceptible to fracture. More than 700,000 people in the United States suffer from them, many don't realize they have it and live with unexplained incapacitating pain. In some cases, people don't even know they have a problem because the fracture causes no pain.

The problem can be fixed surgically, according to Dr. Shahid, in a new less invasive way, but the emphasis should always be on prevention of bone loss. Post-menopausal women over 50 should talk to their doctor about early diagnosis of osteoporosis, and taking calcium and bone-loss medications.

When a fracture doesn't heal however, a new procedure called balloon kyphoplasty can help. In a nutshell, it uses two balloons to create space in the collapsed vertebrae. A tiny incision is made on each side of the spine, and two balloons are inserted to create a cavity that restores vertebral height after the vertebrae are cemented.

Since the procedure began at Danbury Hospital in 2003, more than 200 patients have been helped.

In addition, minimally invasive surgery is also used to correct lumbar spinal stenosis, or a narrowing of the spinal canal. A natural process related to aging in some people, this problem is the most common reason people have back surgery after age 50, according to Dr. Bomback, with 8 percent of people in the United States being affected.

Lumbar spinal stenosis can be caused by a thickening of ligaments, when spinal joints get arthritic and when discs bulge. It can cause pain in the back, down the leg, and in the buttocks, which can feel like numbness, tingling, shooting pain, deep pain, tightness and weakness. Usually, pain subsides with forward bending.

Lumbar spinal stenosis can be treated with medications, exercise, physical therapy, and spinal epidural cortisone injections, but for those who don't improve, surgery may be the only solution.

Dr. Bomback and Dr. Kramer can provide patients with an alternative procedure to the more traditional open back surgery, called laminectomy. These surgeons, along with others, are skilled in the new, more minimally invasive technique, call the X-Stop procedure. The X-Stop, which requires only a small incision, uses an implant (X-Stop) that is inserted into the spine to open the narrowing of the spinal canal. Danbury Hospital was the first hospital in Connecticut to offer the X-Stop procedure, according to Dr. Kramer.

Approved by the Federal Food and Drug Administration in November 2005, it has been offered at Danbury Hospital since last March. More than 30 patients have already been helped by it, according to Dr. Bomback.

"Results are very promising," he said.

For more information on back surgery, or the Spine Center at Danbury Hospital's Center for Advanced Orthopedic Care, visit www.danburyhospital.org, or talk to your doctor. For a physician referral, contact the Danbury Hospital Center at 1-866-374-0007.